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New Job Title for Druggists: Diabetes Coach

By [IAN URBINA](#)

ASHEVILLE, N.C. — In an office behind the Hershey's candy rack at a Kerr Drug here, Stuart Rohrbaugh shifts in his chair as his pharmacist stares at a dangerously high blood sugar reading from last month.

"I think that was the day a buddy of mine brought over his home-brew beer," stammers Mr. Rohrbaugh, whose [diabetes](#) was diagnosed six years ago.

Silently, the pharmacist lifts her eyes, sending Mr. Rohrbaugh's gaze to the floor.

"I know, I know," he says.

Mr. Rohrbaugh, 37, learned relatively late in life that he had Type 1 diabetes, a malfunction of the immune system that usually surfaces in childhood. There are hundreds in Asheville with that type, and even more with the more prevalent Type 2, which often hits as a consequence of [obesity](#) or age.

And so in this town of 75,000, where people like to use sugar in their coffee and in their iced tea, and as a term of endearment, Mr. Rohrbaugh and the others face the formidable challenge of either managing their diabetes or suffering its potential ravages: blindness, organ failure, stroke.

In trying to meet that challenge, the kind of polite browbeating that Mr. Rohrbaugh faced at his local pharmacy seems to be paying off.

For the past 10 years, the city of Asheville has given free diabetes medicines and supplies to municipal workers who have the disease if they agree to monthly counseling from specially trained pharmacists. The results, city officials say, have been dramatic: Within months of

enrolling in the program, almost twice as many have their blood sugar levels under control. In addition, the city's health plan has saved more than \$2,000 in medical costs per patient each year.

There are at least 21 million diabetics in the United States, and health officials have begun to despair of combating the disease because it involves getting people to do something much more difficult than taking their medicine or having surgery: altering their daily behavior, like their eating and exercise habits.

But amid this gloom, Asheville's public health experiment is something of a ray of hope, an example, however modest, of the kind of house-to-house, block-to-block battle that can win results and save lives in the face of a disease that has resisted quick-fix solutions.

Indeed, in recent years, about 40 other employers across the country — private companies or municipalities — have adopted versions of the program.

“We get a four-to-one return on investment,” said Barry Bunting, pharmacy director at Mission Hospitals, which runs the program in Asheville for about 450 city and hospital employees. For every dollar spent on medicines or counseling about [diet](#), exercise and lifestyle, he said, the city saves \$4 by preventing emergency room visits, dialysis, amputations or other common complications of diabetes.

During the first five years of the program, participants took an average of six sick days from work a year, half the number of previous years. Within three years of enrolling in the program, patients had halved their chances of going blind or needing dialysis or an amputation, a founder of the program said.

“When you have to answer to someone each month, you think twice before eating what you shouldn't,” said George Ledford, 69, who joined the program five years ago.

The fifth deadliest disease in the nation, diabetes costs more than \$130 billion per year in medical expenses and lost productivity in the workplace. While there is no cure, patients can delay or prevent

complications by using medications properly and adjusting their diet and exercise routines.

But the efforts to help people change their lifestyles are complicated by a health care system in which insurers typically do not reimburse doctors for the kinds of counseling and monitoring that might keep patients on track.

So the Asheville experiment has enlisted pharmacists in its model. They serve as coach, clinician and cheerleader for patients, and they earn a fee for each session.

“Once you have a sense of what motivates them, you set little goals each visit and then build on them,” said Dana K. Arrington, a clinical pharmacist at Kerr Drug who sees at least one diabetes patient a day.

“This month, get on the treadmill once a week for 15 minutes. Next month, we write down each time you take your pills. Then switch from whole to skim milk. It’s a slow process if you want it to stick.”

While diabetics have often shown significant improvements in controlling their blood sugar soon after taking diabetes education classes, they typically relapse within three months, according to a study released in March 2003 by the Journal of the American Pharmaceutical Association. The report was co-written by Carole W. Cranor, a pharmacoeconomist who was then at the [University of North Carolina](#), Chapel Hill.

What makes the Asheville Project unusual, the study found, is that at the end of the first year of the program, half the participants had their blood sugar under control. That number increased to two-thirds of the original group at the end of the program’s third year.

“Asheville had unusually long-term successes because of the distinct role played by pharmacists, who have at least five years of academic training and who are more rooted and accessible in communities than doctors,” said Ms. Cranor, who is now a clinical pharmacist at Dorothea Dix Hospital in Raleigh, N.C.

Aside from Asheville's successes, the popularity of the program is being driven by pharmaceutical companies.

GlaxoSmithKline and Sanofi-Aventis, which make diabetes drugs, have jointly given about a million dollars in the past five years to the [American Pharmacists Association Foundation](#), a nonprofit research group, to help promote and replicate the program, said Dan Garrett, one of the founders of the Asheville Project and a director at the foundation.

Diabetics frequently fail to take their medications consistently, studies show, so these drugmakers stand to profit from better patient compliance. None of the employers or cities that adopt the program are obligated to buy from these companies, though.

The frequency of consultations is the reason the Asheville Project has shown such long-term benefits, Mr. Garrett said.

For patients struggling to adjust their daily habits, it is the little questions — those too small and too numerous to justify an appointment with a doctor—that make the disease so difficult to manage and pharmacists' involvement so invaluable, patients said.

When Mr. Ledford kept getting sores on his feet, a common diabetes complication, his pharmacist ventured into the aisles to help him find a lotion that worked. When Mr. Ledford's blood sugar levels spiked mysteriously, the pharmacist questioned him about any changes in his routine. "The new cup I was using for my cornflakes was the wrong size," recounted Mr. Ledford, explaining that this mistake in figuring his carbohydrate consumption was throwing off his insulin dosage calculations.

Despite his occasional lapses, Mr. Rohrbaugh said that without frequent feedback from his pharmacist and the program's nutritionist, he would never have been able to learn how to count his carbohydrates, drop the necessary 20 pounds and administer his insulin. "I also was struggling to afford it all," said Mr. Rohrbaugh, a worker in city planning who was paying more than \$300 per month for medicines and supplies before joining the program two years ago.

John Miall, one of the founders of the Asheville program, who recently retired as the city's director of risk management, said that within its first year the average annual health care cost for diabetic employees dropped to \$3,554 from \$6,127.

"Do the math," he said. "If just one employee is kept off dialysis, that is a \$100,000 net savings for the year. That pays for a heck of a lot of preventative medicine and supplies."